

IN THE CLAIMS:

Please cancel claims 2, 3, 5, 11, 12 and 14, amend claims 1, 8, 10, 15 and 17, and add claims 19-41, in accordance with the following listing showing the status of all claims in the application.

1. (Currently Amended) A method for predicting whether an on-line shopper is will be converted into becoming a purchaser of an item based on sales promotions offered by an on-line vendor, comprising the steps of:

storing customer profile information corresponding to a plurality of on-line shoppers;

storing customer web log information corresponding to the plurality of on-line shoppers;

storing product information promotion attributes corresponding to a plurality of products offered for sale by the on-line vendor sales promotions that have been offered;

storing promotion attributes corresponding to the plurality of products;

constructing a model which simulates inputting the customer profile information, the web log information and the promotion attributes into a model for simulating shopping behavior as a function of the customer profile information, customer log information, product information, and the promotion attributes; and

generating a percentage chance that the customer purchases a particular item based on the model;

displaying the percentage chance

using the model to target delivery of future sales promotions.

2. (Canceled)

3. (Canceled)

4. (Original) The method of Claim 1, wherein the model comprises a logistic regression model.

5. (Canceled)

6. (Original) The method of Claim 4, wherein the model is partially based on traditional logistical regression theory and partially on the maximum utility theory.

7. (Original) The method of Claim 1, wherein customer profile information includes age, sex, religion, income, ethnicity, marital status, geographical location, number of children, interests, hobbies, spending habits, and zip code.

8. (Currently Amended) The method of Claim 1, wherein the customer web log information includes contains data regarding when ~~the a~~ customer accessed ~~the a~~ web site, how long the customer visited the web site, which items were of interest, how the customer heard about the web site, whether the customer saw ~~the a~~ promotion, whether the customer was motivated to taking action as a result of the promotion, whether the customer inspected

an item, whether the customer put the item back, whether the customer bought ~~an~~ the item, and ~~the~~ a quantity of items purchased.

9. (Original) The method of Claim 1, wherein the promotion attributes include one of sales, upgrades, extended warranties, buy-one-get-one free, financing packages, free options, rebates, coupons, donations to charities, and free gifts.

10. (Currently Amended) A computer-readable medium having stored thereon instructions for predicting whether an on-line shopper ~~is~~ will be converted into becoming a purchaser of an item based on sales promotions offered by an on-line vendor, the instructions comprising the steps of:

storing customer profile information corresponding to a plurality of on-line shoppers;

storing customer web log information corresponding to the plurality of on-line shoppers;

storing product information promotion attributes corresponding to a plurality of ~~products offered for sale by the on-line vendor~~ sales promotions that have been offered;

~~storing promotion attributes corresponding to the plurality of products;~~

~~constructing a model which simulates inputting the customer profile information, the web log information and the promotion attributes into a model for simulating shopping behavior as a function of the customer profile information, customer log information, product information, and the promotion attributes; and~~

~~generating a percentage chance that the customer purchases a particular item based on the model;~~

~~displaying the percentage chance~~

using the model to target delivery of future sales promotions.

11. (Canceled)

12. (Canceled)

13. (Original) The computer-readable medium of Claim 10, wherein the model comprises a logistic regression model.

14. (Canceled)

15. (Currently Amended) The computer-readable medium of Claim 14, 13, wherein the model is partially based on traditional logistical regression theory and partially on the maximum utility theory.

16. (Original) The computer-readable medium of Claim 10, wherein customer profile information includes age, sex, religion, income, ethnicity, marital status, geographical location, number of children, interests, hobbies, spending habits, and zip code.

17. (Currently Amended) The computer-readable medium of Claim 10, wherein the customer web log information includes contains data regarding when ~~the~~ a customer accessed ~~the~~ a web site, how long the customer visited the web site, which items were of interest, how the customer heard about the web site, whether the customer saw ~~the~~ a promotion, whether the customer was motivated to taking action as a result of the promotion, whether the customer inspected an item, whether the customer put the item back, whether the customer bought ~~an~~ the item, and ~~the~~ a quantity of items purchased.

18. (Original) The computer-readable medium of Claim 10, wherein the promotion attributes include one of sales, upgrades, extended warranties, buy-one-get-one free, financing packages, free options, rebates, coupons, donations to charities, and free gifts.

19. (New) A method according to Claim 1, further comprising a step of using the model to tailor sales promotions to individual shoppers.

20. (New) A method according to Claim 19, wherein sales promotions automatically are customized to a shopper based on customer profile information for said shopper.

21. (New) A method according to Claim 1, further comprising steps of storing product information corresponding to a plurality of products offered for sale by the on-line

vendor and inputting the product information into the model, and wherein the shopping behavior also is simulated as a function of the product information.

22. (New) A method according to Claim 1, further comprising a step of using the model to compute a percentage likelihood that a shopper will be converted into becoming a purchaser.

23. (New) A method according to Claim 1, further comprising a step of using the model to simulate a conversion of a shopper into a purchaser.

24. (New) A method according to Claim 1, further comprising steps of using a simulator based on the model, varying promotion attributes input into the simulator, and then observing results generated by the simulator.

25. (New) A method according to Claim 1, further comprising a step of continuously updating and improving the model based on new information.

26. (New) A method according to Claim 1, further comprising a step of using an optimization engine to generate statistically driven sales promotion plans that have been optimized with respect to at least one objective function.

27. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise a step of using the model to tailor sales promotions to individual shoppers.

28. (New) The computer-readable medium of Claim 27, wherein sales promotions automatically are customized to a shopper based on customer profile information for said shopper.

29. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise steps of storing product information corresponding to a plurality of products offered for sale by the on-line vendor and inputting the product information into the model, and wherein the shopping behavior also is simulated as a function of the product information.

30. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise a step of using the model to compute a percentage likelihood that a shopper will be converted into becoming a purchaser.

31. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise a step of using the model to simulate a conversion of a shopper into a purchaser.

32. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise steps of using a simulator based on the model, varying promotion attributes input into the simulator, and then observing results generated by the simulator.

33. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise a step of continuously updating and improving the model based on new information.

34. (New) The computer-readable medium of Claim 10, wherein the instructions further comprise a step of using an optimization engine to generate statistically driven sales promotion plans that have been optimized with respect to at least one objective function.

35. (New) A method for predicting what types of on-line shoppers will make purchases based on offered sales promotions, comprising:

obtaining profile information for a plurality of shoppers;  
obtaining a set of promotion attributes pertaining to sales promotions that were displayed to the shoppers;

obtaining behavioral information regarding on-line shopping behaviors of the shoppers, including the on-line shopping behaviors during times that the sales promotions were displayed;

based on the behavioral information, using a mathematical model to relate the promotion attributes to the profile information in order to estimate effectiveness of a particular sales promotion with respect to at least one specified shopper.

36. (New) A method according to Claim 35, further comprising a step of using the mathematical model to target delivery of future sales promotions.

37. (New) A method according to Claim 35, further comprising a step of using the mathematical model to tailor sales promotions to individual shoppers.

38. (New) A method according to Claim 37, wherein sales promotions automatically are customized to a shopper based on customer profile information for said shopper.

39. (New) A method according to Claim 35, further comprising steps of using a simulator based on the mathematical model, varying promotion attributes input into the simulator, and then observing results generated by the simulator.

40. (New) A method according to Claim 35, further comprising a step of continuously updating and improving the mathematical model based on new information.

41. (New) A method according to Claim 35, further comprising a step of using an optimization engine to generate statistically driven promotion plans that have been optimized with respect to at least one objective function.